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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/929,888

Applicant(s)

NAKANO ET AL.

Examiner

Alicia Baturay

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO-8300)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

1. This Office Action is in response to the amendment filed 01 November 2007.
2. Claims 1, 10 and 11 were amended.
3. Claims 1-19 are pending in this Office Action.

Response to Amendment

4. The rejection is respectfully maintained as set forth in the last Office Action mailed on 11 September 2007. Applicant's arguments with respect to claims 1-19 have been fully considered but they are not persuasive and the old rejection maintained.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim 1, 5, 7, 10, 11 and 16 rejected under 35 U.S.C. 102(e) as being anticipated by Nickum (U.S. 6,359,661).

7. With respect to claim 1, Nickum teaches a method of controlling an information processing apparatus connected to a plurality of control devices over a network, the information processing apparatus including one or more digital devices forming a plurality of controlled hardware portions, a storage device operable to carry out at least one function not performed by any of the plurality of controlled hardware portions, and a controller operable to carry out at least another function not performed by any of the plurality of controlled hardware portions, the method comprising:

Selecting, at a given one of the plurality of control devices, a specific one of the plurality of controlled hardware portions of the information processing apparatus to be controlled by the given one of the plurality of control devices; transmitting, from the given one of the plurality (Nickum, Fig. 1; col. 3, lines 49-54) of control devices (Nickum, Fig. 3, element 320; col. 5, lines 11-20) to the information processing apparatus (Nickum, col. 8, lines 34-46) over the network, an identification number (Nickum, col. 7, lines 38-39) that identifies only the selected one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) and identification information that identifies only the given one of the plurality of control devices (Nickum, col. 8, lines 36-43); storing, in a control correspondence table of the storage device of the information processing apparatus (Nickum, col. 8, lines 34-46), the identification number (Nickum, col. 7, lines 38-39) that identifies only the selected one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) and the identification information that identifies only the given one of the plurality of control devices (Nickum, col. 8, lines 36-43) that were transmitted by the given one of the plurality of control devices such that the identification number (Nickum, col. 7, lines 38-39) that identifies only the selected

one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) is associated with the identification information that identifies only the given one of the plurality of control devices, the at least one function not performed by any of the plurality of controlled hardware portions including the storing step (Nickum, col. 8, lines 36-43); repeating the selecting step, the transmitting step and the storing step using a further one of the plurality of control devices (Nickum, Fig. 1; col. 3, lines 49-54) and a further one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) to associate the identification information that identifies only the further one of the plurality of control devices (Nickum, col. 8, lines 36-43) with the identification number that identifies only the further one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11); transmitting a control request from the given one of the plurality of control devices or from the further one of the plurality of control devices to the information processing apparatus over the network, the control request including the identification information that identifies only the transmitting control device (Nickum, col. 8, lines 36-43); referring to the control correspondence table of the storage device, using the controller (Nickum, Fig. 3, element 320; col. 7, lines 6-11), to obtain the identification number (Nickum, col. 7, lines 38-39) that identifies only the controlled hardware portion of the information processing apparatus (Nickum, col. 7, lines 6-11) that is associated with the identification information that identifies only the transmitting control device, the at least another function not performed by any of the plurality of controlled hardware portions including the referring step (Nickum, col. 8, lines 36-43); and controlling the associated portion of the information processing apparatus based on the control request (Nickum, col. 7, lines 14-60); wherein the plurality of controlled hardware

portions of the information processing apparatus is formed of functional subunits selected from the group consisting of a tuner having a receiving function, a monitor subunit having a display function, and a recorder/player subunit having at least one of a recording function or a playback function (Nickum, col. 3, lines 49-64), and the storage device does not include any functional subunits selected from that group (Nickum, col. 8, lines 36-43).

7. With respect to claim 5, Nickum teaches the invention described in claim 1, including the method where the given one of the plurality of control devices and the further one of the plurality of control devices each transmit to the information processing apparatus through a wireless communication interface (Nickum, col. 3, lines 49-64).
8. With respect to claim 7, Nickum teaches the invention described in claim 5, including the method where wireless communication is carried out over infra-red wavelength (Nickum, col. 3, lines 49-64).
9. Claims 10, 11 and 16 do not teach or define any new limitations above claims 1, 5 and 7 and therefore are rejected for similar reasons.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 2, 4, 6, 8, 9, 13, 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nickum and in further view of Croÿ et al. (U.S. 6,476,825).

Nickum teaches the invention substantially as claimed including the program control data is created and modified by a user with the master control user id assigned to the remote control device. The remote control device is optionally assigned one or more user ids for creating, maintaining, and in one embodiment activating a user-customizable profile which controls programming access according to the users preferences. The program control data, user profile data, and related circuitry is stored in the remote control device, or alternatively in the television receiver or a control device attached to the television receiver. Where the circuitry is not in the remote control devices the remote control device has a unique identifying signal which causes the programming control circuitry to employ the program control data and user profile data associated with that particular remote control device (see Abstract).

12. With respect to claim 2, Nickum teaches the invention described in claim 1, including a method of controlling an information processing apparatus connected to a plurality of control devices over a network, the information processing apparatus including one or more digital devices forming a plurality of controlled hardware portions, a storage device operable to carry out at least one function not performed by any of the plurality of controlled hardware

portions, and a controller operable to carry out at least another function not performed by any of the plurality of controlled hardware portions, the method comprising: selecting, at a given one of the plurality of control devices, a specific one of the plurality of controlled hardware portions of the information processing apparatus to be controlled by the given one of the plurality of control devices; transmitting, from the given one of the plurality (Nickum, Fig. 1; col. 3, lines 49-54) of control devices (Nickum, Fig. 3, element 320; col. 5, lines 11-20) to the information processing apparatus (Nickum, col. 8, lines 34-46) over the network, an identification number (Nickum, col. 7, lines 38-39) that identifies only the selected one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) and identification information that identifies only the given one of the plurality of control devices (Nickum, col. 8, lines 36-43); storing, in a control correspondence table of the storage device of the information processing apparatus (Nickum, col. 8, lines 34-46), the identification number (Nickum, col. 7, lines 38-39) that identifies only the selected one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) and the identification information that identifies only the given one of the plurality of control devices (Nickum, col. 8, lines 36-43) that were transmitted by the given one of the plurality of control devices such that the identification number (Nickum, col. 7, lines 38-39) that identifies only the selected one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) is associated with the identification information that identifies only the given one of the plurality of control devices, the at least one function not performed by any of the plurality of controlled hardware portions including the storing step (Nickum, col. 8, lines 36-43); repeating the selecting step, the transmitting step and the storing step using a further one of the plurality of control

devices (Nickum, Fig. 1; col. 3, lines 49-54) and a further one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) to associate the identification information that identifies only the further one of the plurality of control devices (Nickum, col. 8, lines 36-43) with the identification number that identifies only the further one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11); transmitting a control request from the given one of the plurality of control devices or from the further one of the plurality of control devices to the information processing apparatus over the network, the control request including the identification information that identifies only the transmitting control device (Nickum, col. 8, lines 36-43); referring to the control correspondence table of the storage device, using the controller (Nickum, Fig. 3, element 320; col. 7, lines 6-11), to obtain the identification number (Nickum, col. 7, lines 38-39) that identifies only the controlled hardware portion of the information processing apparatus (Nickum, col. 7, lines 6-11) that is associated with the identification information that identifies only the transmitting control device, the at least another function not performed by any of the plurality of controlled hardware portions including the referring step (Nickum, col. 8, lines 36-43); and controlling the associated portion of the information processing apparatus based on the control request (Nickum, col. 7, lines 14-60); wherein the plurality of controlled hardware portions of the information processing apparatus is formed of functional subunits selected from the group consisting of a tuner having a receiving function, a monitor subunit having a display function, and a recorder/player subunit having at least one of a recording function or a playback function (Nickum, col. 3, lines 49-64), and the storage device does not include any functional subunits selected from that group (Nickum, col. 8, lines 36-43).

Nickum does not explicitly teach use of an IEEE 1394 digital interface.

However, Croÿ teaches the method where the given one of the plurality of control devices and the further one of the plurality of control devices each transmit to the information processing apparatus through an IEEE 1394 digital interface (Croÿ, col. 4, lines 38-47).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nickum in view of Croÿ in order to enable the use of an IEEE 1394 digital interface. One would be motivated to do so in order to enable the use of a hand-held remote device which forms a general, nearly unlimited standard user-interface for home appliance control.

13. With respect to claim 4, Nickum teaches the invention described in claim 1, including a method of controlling an information processing apparatus connected to a plurality of control devices over a network, the information processing apparatus including one or more digital devices forming a plurality of controlled hardware portions, a storage device operable to carry out at least one function not performed by any of the plurality of controlled hardware portions, and a controller operable to carry out at least another function not performed by any of the plurality of controlled hardware portions, the method comprising: selecting, at a given one of the plurality of control devices, a specific one of the plurality of controlled hardware portions of the information processing apparatus to be controlled by the given one of the plurality of control devices; transmitting, from the given one of the plurality (Nickum, Fig. 1; col. 3, lines 49-54) of control devices (Nickum, Fig. 3, element 320; col. 5, lines 11-20) to

the information processing apparatus (Nickum, col. 8, lines 34-46) over the network, an identification number (Nickum, col. 7, lines 38-39) that identifies only the selected one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) and identification information that identifies only the given one of the plurality of control devices (Nickum, col. 8, lines 36-43); storing, in a control correspondence table of the storage device of the information processing apparatus (Nickum, col. 8, lines 34-46), the identification number (Nickum, col. 7, lines 38-39) that identifies only the selected one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) and the identification information that identifies only the given one of the plurality of control devices (Nickum, col. 8, lines 36-43) that were transmitted by the given one of the plurality of control devices such that the identification number (Nickum, col. 7, lines 38-39) that identifies only the selected one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) is associated with the identification information that identifies only the given one of the plurality of control devices, the at least one function not performed by any of the plurality of controlled hardware portions including the storing step (Nickum, col. 8, lines 36-43); repeating the selecting step, the transmitting step and the storing step using a further one of the plurality of control devices (Nickum, Fig. 1; col. 3, lines 49-54) and a further one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) to associate the identification information that identifies only the further one of the plurality of control devices (Nickum, col. 8, lines 36-43) with the identification number that identifies only the further one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11); transmitting a control request from the given one of the plurality of control devices or from the further one of the plurality of

control devices to the information processing apparatus over the network, the control request including the identification information that identifies only the transmitting control device (Nickum, col. 8, lines 36-43); referring to the control correspondence table of the storage device, using the controller (Nickum, Fig. 3, element 320; col. 7, lines 6-11), to obtain the identification number (Nickum, col. 7, lines 38-39) that identifies only the controlled hardware portion of the information processing apparatus (Nickum, col. 7, lines 6-11) that is associated with the identification information that identifies only the transmitting control device, the at least another function not performed by any of the plurality of controlled hardware portions including the referring step (Nickum, col. 8, lines 36-43); and controlling the associated portion of the information processing apparatus based on the control request (Nickum, col. 7, lines 14-60); wherein the plurality of controlled hardware portions of the information processing apparatus is formed of functional subunits selected from the group consisting of a tuner having a receiving function, a monitor subunit having a display function, and a recorder/player subunit having at least one of a recording function or a playback function (Nickum, col. 3, lines 49-64), and the storage device does not include any functional subunits selected from that group (Nickum, col. 8, lines 36-43).

Nickum does not explicitly teach use of a digital versatile disc.

However, Croÿ teaches the method where the associated portion of the information processing apparatus is operable to reproduce software information recorded on a digital versatile disc (Croÿ, col. 20, line 59 – col. 21, line 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nickum in view of Croÿ in order to enable the use of a digital versatile

disc. One would be motivated to do so in order to enable the use of a hand-held remote device which forms a general, nearly unlimited standard user-interface for home appliance control.

14. With respect to claim 6, Nickum teaches the invention described in claim 5, including a method of controlling an information processing apparatus connected to a plurality of control devices over a network, the information processing apparatus including one or more digital devices forming a plurality of controlled hardware portions, a storage device operable to carry out at least one function not performed by any of the plurality of controlled hardware portions, and a controller operable to carry out at least another function not performed by any of the plurality of controlled hardware portions, the method comprising: selecting, at a given one of the plurality of control devices, a specific one of the plurality of controlled hardware portions of the information processing apparatus to be controlled by the given one of the plurality of control devices; transmitting, from the given one of the plurality (Nickum, Fig. 1; col. 3, lines 49-54) of control devices (Nickum, Fig. 3, element 320; col. 5, lines 11-20) to the information processing apparatus (Nickum, col. 8, lines 34-46) over the network, an identification number (Nickum, col. 7, lines 38-39) that identifies only the selected one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) and identification information that identifies only the given one of the plurality of control devices (Nickum, col. 8, lines 36-43); storing, in a control correspondence table of the storage device of the information processing apparatus (Nickum, col. 8, lines 34-46), the identification number (Nickum, col. 7, lines 38-39) that identifies only the selected one of the plurality of

controlled hardware portions (Nickum, col. 7, lines 6-11) and the identification information that identifies only the given one of the plurality of control devices (Nickum, col. 8, lines 36-43) that were transmitted by the given one of the plurality of control devices such that the identification number (Nickum, col. 7, lines 38-39) that identifies only the selected one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) is associated with the identification information that identifies only the given one of the plurality of control devices, the at least one function not performed by any of the plurality of controlled hardware portions including the storing step (Nickum, col. 8, lines 36-43); repeating the selecting step, the transmitting step and the storing step using a further one of the plurality of control devices (Nickum, Fig. 1; col. 3, lines 49-54) and a further one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) to associate the identification information that identifies only the further one of the plurality of control devices (Nickum, col. 8, lines 36-43) with the identification number that identifies only the further one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11); transmitting a control request from the given one of the plurality of control devices or from the further one of the plurality of control devices to the information processing apparatus over the network, the control request including the identification information that identifies only the transmitting control device (Nickum, col. 8, lines 36-43); referring to the control correspondence table of the storage device, using the controller (Nickum, Fig. 3, element 320; col. 7, lines 6-11), to obtain the identification number (Nickum, col. 7, lines 38-39) that identifies only the controlled hardware portion of the information processing apparatus (Nickum, col. 7, lines 6-11) that is associated with the identification information that identifies only the transmitting control

device, the at least another function not performed by any of the plurality of controlled hardware portions including the referring step (Nickum, col. 8, lines 36-43); and controlling the associated portion of the information processing apparatus based on the control request (Nickum, col. 7, lines 14-60); wherein the plurality of controlled hardware portions of the information processing apparatus is formed of functional subunits selected from the group consisting of a tuner having a receiving function, a monitor subunit having a display function, and a recorder/player subunit having at least one of a recording function or a playback function (Nickum, col. 3, lines 49-64), and the storage device does not include any functional subunits selected from that group (Nickum, col. 8, lines 36-43).

Nickum does not explicitly teach use of the Bluetooth communication standard.

However, Croÿ teaches the method where wireless communication is carried out using the Bluetooth communication standard (Croÿ, col. 26, lines 37-42).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nickum in view of Croÿ in order to enable the Bluetooth communication standard. One would be motivated to do so in order to enable the use of a hand-held remote device which forms a general, nearly unlimited standard user-interface for home appliance control.

15. With respect to claim 8, Nickum teaches the invention described in claim 1, including a method of controlling an information processing apparatus connected to a plurality of control devices over a network, the information processing apparatus including one or more digital devices forming a plurality of controlled hardware portions, a storage device operable to

carry out at least one function not performed by any of the plurality of controlled hardware portions, and a controller operable to carry out at least another function not performed by any of the plurality of controlled hardware portions, the method comprising: selecting, at a given one of the plurality of control devices, a specific one of the plurality of controlled hardware portions of the information processing apparatus to be controlled by the given one of the plurality of control devices; transmitting, from the given one of the plurality (Nickum, Fig. 1; col. 3, lines 49-54) of control devices (Nickum, Fig. 3, element 320; col. 5, lines 11-20) to the information processing apparatus (Nickum, col. 8, lines 34-46) over the network, an identification number (Nickum, col. 7, lines 38-39) that identifies only the selected one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) and identification information that identifies only the given one of the plurality of control devices (Nickum, col. 8, lines 36-43); storing, in a control correspondence table of the storage device of the information processing apparatus (Nickum, col. 8, lines 34-46), the identification number (Nickum, col. 7, lines 38-39) that identifies only the selected one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) and the identification information that identifies only the given one of the plurality of control devices (Nickum, col. 8, lines 36-43) that were transmitted by the given one of the plurality of control devices such that the identification number (Nickum, col. 7, lines 38-39) that identifies only the selected one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) is associated with the identification information that identifies only the given one of the plurality of control devices, the at least one function not performed by any of the plurality of controlled hardware portions including the storing step (Nickum, col. 8, lines 36-43); repeating the selecting step,

the transmitting step and the storing step using a further one of the plurality of control devices (Nickum, Fig. 1; col. 3, lines 49-54) and a further one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) to associate the identification information that identifies only the further one of the plurality of control devices (Nickum, col. 8, lines 36-43) with the identification number that identifies only the further one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11); transmitting a control request from the given one of the plurality of control devices or from the further one of the plurality of control devices to the information processing apparatus over the network, the control request including the identification information that identifies only the transmitting control device (Nickum, col. 8, lines 36-43); referring to the control correspondence table of the storage device, using the controller (Nickum, Fig. 3, element 320; col. 7, lines 6-11), to obtain the identification number (Nickum, col. 7, lines 38-39) that identifies only the controlled hardware portion of the information processing apparatus (Nickum, col. 7, lines 6-11) that is associated with the identification information that identifies only the transmitting control device, the at least another function not performed by any of the plurality of controlled hardware portions including the referring step (Nickum, col. 8, lines 36-43); and controlling the associated portion of the information processing apparatus based on the control request (Nickum, col. 7, lines 14-60); wherein the plurality of controlled hardware portions of the information processing apparatus is formed of functional subunits selected from the group consisting of a tuner having a receiving function, a monitor subunit having a display function, and a recorder/player subunit having at least one of a recording function or a

playback function (Nickum, col. 3, lines 49-64), and the storage device does not include any functional subunits selected from that group (Nickum, col. 8, lines 36-43).

Nickum does not explicitly teach reproducing audio visual information recorded on a hard disc.

However, Croÿ teaches the method where the associated portion of the information processing apparatus is operable to reproduce audio visual information recorded on a hard disc (Croÿ, col. 20, line 59 – col. 21, line 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nickum in view of Croÿ in order to enable reproducing audio visual information recorded on a hard disc. One would be motivated to do so in order to enable the use of a hand-held remote device which forms a general, nearly unlimited standard user-interface for home appliance control.

16. With respect to claim 9, Nickum teaches the invention described in claim 1, including a method of controlling an information processing apparatus connected to a plurality of control devices over a network, the information processing apparatus including one or more digital devices forming a plurality of controlled hardware portions, a storage device operable to carry out at least one function not performed by any of the plurality of controlled hardware portions, and a controller operable to carry out at least another function not performed by any of the plurality of controlled hardware portions, the method comprising: selecting, at a given one of the plurality of control devices, a specific one of the plurality of controlled hardware portions of the information processing apparatus to be controlled by the given one of the

plurality of control devices; transmitting, from the given one of the plurality (Nickum, Fig. 1; col. 3, lines 49-54) of control devices (Nickum, Fig. 3, element 320; col. 5, lines 11-20) to the information processing apparatus (Nickum, col. 8, lines 34-46) over the network, an identification number (Nickum, col. 7, lines 38-39) that identifies only the selected one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) and identification information that identifies only the given one of the plurality of control devices (Nickum, col. 8, lines 36-43); storing, in a control correspondence table of the storage device of the information processing apparatus (Nickum, col. 8, lines 34-46), the identification number (Nickum, col. 7, lines 38-39) that identifies only the selected one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) and the identification information that identifies only the given one of the plurality of control devices (Nickum, col. 8, lines 36-43) that were transmitted by the given one of the plurality of control devices such that the identification number (Nickum, col. 7, lines 38-39) that identifies only the selected one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) is associated with the identification information that identifies only the given one of the plurality of control devices, the at least one function not performed by any of the plurality of controlled hardware portions including the storing step (Nickum, col. 8, lines 36-43); repeating the selecting step, the transmitting step and the storing step using a further one of the plurality of control devices (Nickum, Fig. 1; col. 3, lines 49-54) and a further one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) to associate the identification information that identifies only the further one of the plurality of control devices (Nickum, col. 8, lines 36-43) with the identification number that identifies only the further one of the plurality of

controlled hardware portions (Nickum, col. 7, lines 6-11); transmitting a control request from the given one of the plurality of control devices or from the further one of the plurality of control devices to the information processing apparatus over the network, the control request including the identification information that identifies only the transmitting control device (Nickum, col. 8, lines 36-43); referring to the control correspondence table of the storage device, using the controller (Nickum, Fig. 3, element 320; col. 7, lines 6-11), to obtain the identification number (Nickum, col. 7, lines 38-39) that identifies only the controlled hardware portion of the information processing apparatus (Nickum, col. 7, lines 6-11) that is associated with the identification information that identifies only the transmitting control device, the at least another function not performed by any of the plurality of controlled hardware portions including the referring step (Nickum, col. 8, lines 36-43); and controlling the associated portion of the information processing apparatus based on the control request (Nickum, col. 7, lines 14-60); wherein the plurality of controlled hardware portions of the information processing apparatus is formed of functional subunits selected from the group consisting of a tuner having a receiving function, a monitor subunit having a display function, and a recorder/player subunit having at least one of a recording function or a playback function (Nickum, col. 3, lines 49-64), and the storage device does not include any functional subunits selected from that group (Nickum, col. 8, lines 36-43).

Nickum does not explicitly teach use of a digital television receiver.

However, Croÿ teaches the method where at least one of the given control device and the further control device is a digital television receiver (Croÿ, col. 21, lines 7-10).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nickum in view of Croÿ in order to enable the use of a digital television receiver. One would be motivated to do so in order to enable the use of a hand-held remote device which forms a general, nearly unlimited standard user-interface for home appliance control.

17. Claims 13, 15 and 17 do not teach or define any new limitations above claims 2, 4, 6, 8 and 9 and therefore are rejected for similar reasons.
18. Claims 3, 12, 14, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nickum and in further view of Humpleman et al. (U.S. 6,466,971).
19. With respect to claim 3, Nickum teaches the invention described in claim 1, including a method of controlling an information processing apparatus connected to a plurality of control devices over a network, the information processing apparatus including one or more digital devices forming a plurality of controlled hardware portions, a storage device operable to carry out at least one function not performed by any of the plurality of controlled hardware portions, and a controller operable to carry out at least another function not performed by any of the plurality of controlled hardware portions, the method comprising: selecting, at a given one of the plurality of control devices, a specific one of the plurality of controlled hardware portions of the information processing apparatus to be controlled by the given one of the

plurality of control devices; transmitting, from the given one of the plurality (Nickum, Fig. 1; col. 3, lines 49-54) of control devices (Nickum, Fig. 3, element 320; col. 5, lines 11-20) to the information processing apparatus (Nickum, col. 8, lines 34-46) over the network, an identification number (Nickum, col. 7, lines 38-39) that identifies only the selected one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) and identification information that identifies only the given one of the plurality of control devices (Nickum, col. 8, lines 36-43); storing, in a control correspondence table of the storage device of the information processing apparatus (Nickum, col. 8, lines 34-46), the identification number (Nickum, col. 7, lines 38-39) that identifies only the selected one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) and the identification information that identifies only the given one of the plurality of control devices (Nickum, col. 8, lines 36-43) that were transmitted by the given one of the plurality of control devices such that the identification number (Nickum, col. 7, lines 38-39) that identifies only the selected one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) is associated with the identification information that identifies only the given one of the plurality of control devices, the at least one function not performed by any of the plurality of controlled hardware portions including the storing step (Nickum, col. 8, lines 36-43); repeating the selecting step, the transmitting step and the storing step using a further one of the plurality of control devices (Nickum, Fig. 1; col. 3, lines 49-54) and a further one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) to associate the identification information that identifies only the further one of the plurality of control devices (Nickum, col. 8, lines 36-43) with the identification number that identifies only the further one of the plurality of

controlled hardware portions (Nickum, col. 7, lines 6-11); transmitting a control request from the given one of the plurality of control devices or from the further one of the plurality of control devices to the information processing apparatus over the network, the control request including the identification information that identifies only the transmitting control device (Nickum, col. 8, lines 36-43); referring to the control correspondence table of the storage device, using the controller (Nickum, Fig. 3, element 320; col. 7, lines 6-11), to obtain the identification number (Nickum, col. 7, lines 38-39) that identifies only the controlled hardware portion of the information processing apparatus (Nickum, col. 7, lines 6-11) that is associated with the identification information that identifies only the transmitting control device, the at least another function not performed by any of the plurality of controlled hardware portions including the referring step (Nickum, col. 8, lines 36-43); and controlling the associated portion of the information processing apparatus based on the control request (Nickum, col. 7, lines 14-60); wherein the plurality of controlled hardware portions of the information processing apparatus is formed of functional subunits selected from the group consisting of a tuner having a receiving function, a monitor subunit having a display function, and a recorder/player subunit having at least one of a recording function or a playback function (Nickum, col. 3, lines 49-64), and the storage device does not include any functional subunits selected from that group (Nickum, col. 8, lines 36-43).

Nickum does not explicitly teach use of an AV/C Panel Subunit Model and Command Set.

However, Humpleman teaches the method where the selecting step includes sending a first pass-through command to the information processing apparatus from the given one of

the plurality of control devices or from the further one of the plurality of control devices, and the controlling step includes sending a second pass-through command to the information processing apparatus from the given one of the plurality of control devices or from the further one of the plurality of control devices, the first and second pass-through commands being respectively chosen from an AV/C Panel Subunit Model and Command Set (Humpleman, col. 11, lines 42-48).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nickum in view of Humpleman in order to enable the use of an AV/C Panel Subunit Model and Command Set. One would be motivated to do so in order to allow for the use of a standardized command set.

20. With respect to claim 12, Nickum teaches the invention described in claim 1, including a method of controlling an information processing apparatus connected to a plurality of control devices over a network, the information processing apparatus including one or more digital devices forming a plurality of controlled hardware portions, a storage device operable to carry out at least one function not performed by any of the plurality of controlled hardware portions, and a controller operable to carry out at least another function not performed by any of the plurality of controlled hardware portions, the method comprising: selecting, at a given one of the plurality of control devices, a specific one of the plurality of controlled hardware portions of the information processing apparatus to be controlled by the given one of the plurality of control devices; transmitting, from the given one of the plurality (Nickum, Fig. 1; col. 3, lines 49-54) of control devices (Nickum, Fig. 3, element 320; col. 5, lines 11-20) to

the information processing apparatus (Nickum, col. 8, lines 34-46) over the network, an identification number (Nickum, col. 7, lines 38-39) that identifies only the selected one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) and identification information that identifies only the given one of the plurality of control devices (Nickum, col. 8, lines 36-43); storing, in a control correspondence table of the storage device of the information processing apparatus (Nickum, col. 8, lines 34-46), the identification number (Nickum, col. 7, lines 38-39) that identifies only the selected one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) and the identification information that identifies only the given one of the plurality of control devices (Nickum, col. 8, lines 36-43) that were transmitted by the given one of the plurality of control devices such that the identification number (Nickum, col. 7, lines 38-39) that identifies only the selected one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) is associated with the identification information that identifies only the given one of the plurality of control devices, the at least one function not performed by any of the plurality of controlled hardware portions including the storing step (Nickum, col. 8, lines 36-43); repeating the selecting step, the transmitting step and the storing step using a further one of the plurality of control devices (Nickum, Fig. 1; col. 3, lines 49-54) and a further one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11) to associate the identification information that identifies only the further one of the plurality of control devices (Nickum, col. 8, lines 36-43) with the identification number that identifies only the further one of the plurality of controlled hardware portions (Nickum, col. 7, lines 6-11); transmitting a control request from the given one of the plurality of control devices or from the further one of the plurality of

control devices to the information processing apparatus over the network, the control request including the identification information that identifies only the transmitting control device (Nickum, col. 8, lines 36-43); referring to the control correspondence table of the storage device, using the controller (Nickum, Fig. 3, element 320; col. 7, lines 6-11), to obtain the identification number (Nickum, col. 7, lines 38-39) that identifies only the controlled hardware portion of the information processing apparatus (Nickum, col. 7, lines 6-11) that is associated with the identification information that identifies only the transmitting control device, the at least another function not performed by any of the plurality of controlled hardware portions including the referring step (Nickum, col. 8, lines 36-43); and controlling the associated portion of the information processing apparatus based on the control request (Nickum, col. 7, lines 14-60); wherein the plurality of controlled hardware portions of the information processing apparatus is formed of functional subunits selected from the group consisting of a tuner having a receiving function, a monitor subunit having a display function, and a recorder/player subunit having at least one of a recording function or a playback function (Nickum, col. 3, lines 49-64), and the storage device does not include any functional subunits selected from that group (Nickum, col. 8, lines 36-43).

Nickum does not explicitly teach does explicitly teach the use of sending the correspondence table from one apparatus to another.

However, Humpleman teaches the method further comprising transmitting the control correspondence table from the information processing apparatus to at least another information processing apparatus over the network (Humpleman, col. 8, lines 56-63).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nickum in view of Humpleman in order to enable sending the correspondence table from one apparatus to another. One would be motivated to do so in order to enable sending an entire table of associations between devices and portions rather than each association individually.

21. Claims 14, 18 and 19 do not teach or define any new limitations above claims 3 and 12 and therefore are rejected for similar reasons.

Response to Arguments

22. Applicant's arguments filed 22 June 2007 have been fully considered, but they are not persuasive for the reasons set forth below.
23. ***Applicant Argues:*** The relied on sections of Nickum neither disclose nor suggest wherein the plurality of controlled hardware portions of the information processing apparatus is formed of functional subunits selected from the group consisting of a tuner having a receiving function, a monitor subunit having a display function, and a recorder/player subunit having at least one of a recording function or a playback function, and the storage device does not include any functional subunits selected from that group. This renders the rejection proper, and thus the rejection stands.

In Response: The examiner respectfully submits that Nickum teaches wherein the plurality of controlled hardware portions of the information processing apparatus is formed of functional subunits selected from the group consisting of a tuner having a receiving function, a monitor subunit having a display function, and a recorder/player subunit having at least one of a recording function or a playback function (Television programming comprises the functions of television receiver, such as volume, channel access and display, and power off or on – see Nickum, col. 3, lines 49-64), and the storage device does not include any functional subunits selected from that group (attached device – see Nickum, col. 8, lines 36-43). This renders the rejection proper, and thus the rejection stands.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Baturay whose telephone number is (571) 272-3981. The examiner can normally be reached at M-Th 7:30 - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alicia Baturay
March 28, 2008

/saleh najjar/

Supervisory Patent Examiner, Art Unit 2155